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INTRODUCTION

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The Institute conducts unclassified basic research in applied mathematics, numerical analysis, and computer science in order to extend and improve problem solving capabilities in science and engineering, particularly in aeronautics and space.

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- Numerical methods, with particular emphasis on the development and analysis of basic numerical algorithms;
- Control and parameter identification problems, with emphasis on effective numerical methods;
- Computational problems in engineering and the physical sciences, particularly fluid dynamics, acoustics, structural analysis, and chemistry;
- Computer systems and software, especially vector and parallel computers, microcomputers, and data management.

ICASE reports are considered to be primarily preprints of manuscripts that have been submitted to appropriate research journals or which are to appear in conference proceedings. In the next section, a complete listing of ICASE reports for the calendar years 1975 through December 1989 are given. The final section contains journal and conference proceedings references for older reports.

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